

SE 2050
EMBODIED
CARBON ACTION
PLAN

2023



WHO WE ARE

"We support the vision that all structural engineers shall understand, reduce, and ultimately eliminate embodied carbon in their projects by 2050"

- Ruben Martinez, P.E., S.E.

MARTINEZ MOORE ENGINEERS, LLC is a Texas-based multi-discipline engineering firm with offices in Austin, Houston, Dallas, and Fort Worth, and is certified by the State of Texas as a Historically Underutilized Business (HUB). We are an affiliate firm of Martinez Engineering, LLC and Walter P. Moore and Associates, Inc.

Through our partnership with Walter P Moore, we bring together an unparalleled team of experienced structural and civil engineers as well as parking and building enclosure consultants. We engineer cost- and resource-efficient, forward-thinking solutions, which help support and shape our communities.



President

Ruben Martinez, P.E., S.E.


Rubén Martínez, P.E., S.E. serves as President of Martinez Moore Engineers. Prior to forming Martinez Moore Engineers, Ruben was a Principal at Walter P Moore with over 17 years of experience with the firm in Houston and Austin.



EC Champion

Kate Tomlinson, P.E., LEED AP BD+C

Kate Tomlinson, P.E., LEED AP BD+C is a Principal and serves as Director of Austin Structural Engineering. Prior to joining Martinez Moore Engineers, Kate was a Senior Associate and Project Manager with over 11 years at Walter P Moore in Austin and Houston.



Lessons Learned: A valuable lesson we've gained is the significance of initiating embodied carbon tracking right from the project's inception. This proactive approach enables us to monitor and, ideally, reduce the project's embodied carbon footprint as the project advances.

CONTINUING EDUCATION

In the past year, we reaffirmed the words of our president Ruben Martinez, as quoted on page 2. This commitment has been reinforced through various technical seminars, in-house discussions on carbon tracking tools, and the establishment of a community of representatives at each office dedicated to leading these efforts.

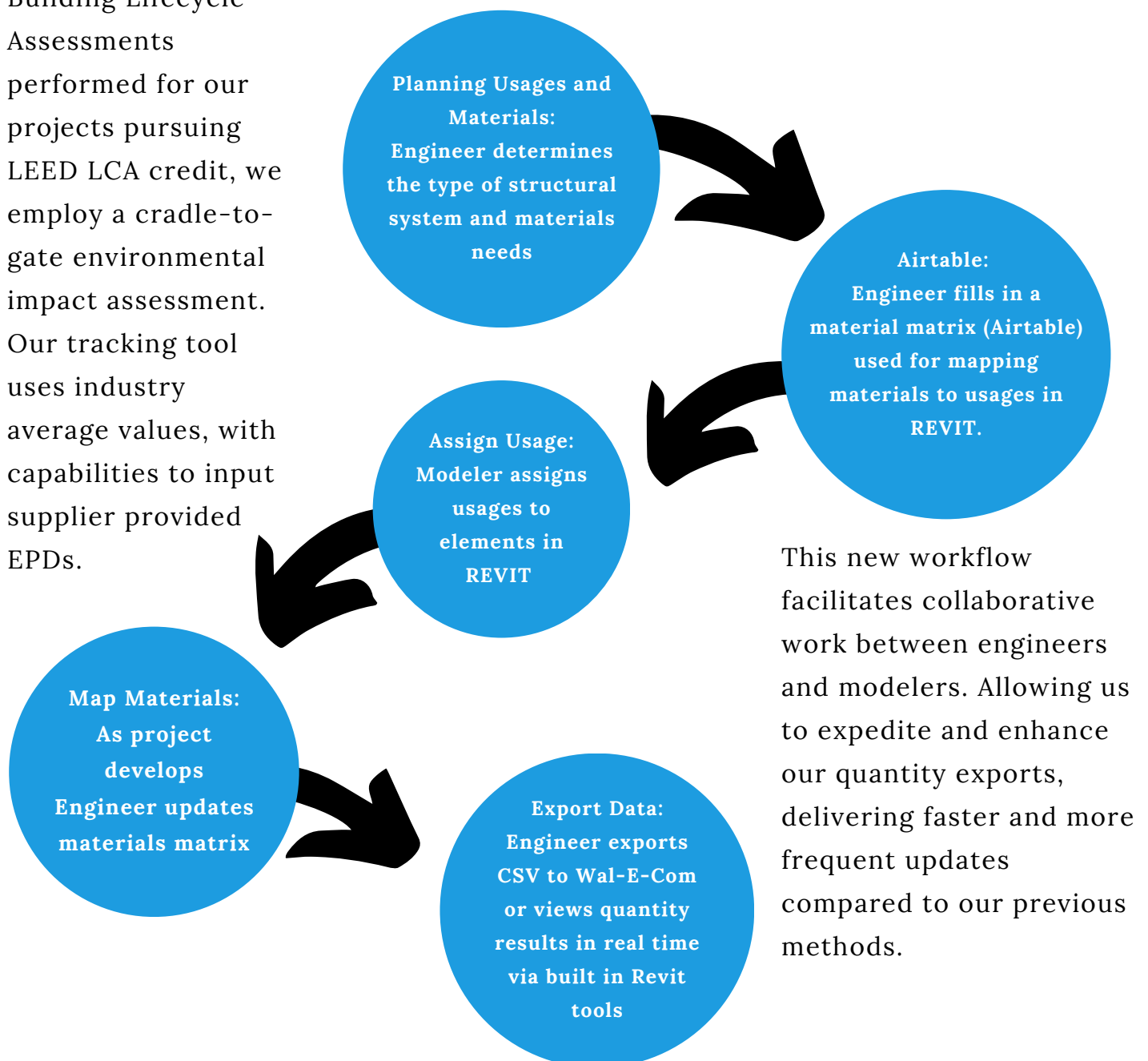
Moving forward, we intend to sustain our engagement with SE2050 by consistently educating our team. Throughout the year we have offered several sustainability focused seminars, most notably the NCSEA seminar titled "Embodied Carbon and Sustainability," which consisted of three webinars focusing on sustainability of materials.

HOW WE MEASURE

Last year, we submitted five projects to the SE2050 database. In line with our ongoing commitment, we intend to maintain this momentum by submitting another five projects in 2024. This year, we began using a new workflow (illustrated below), which has significantly streamlined quantity tracking within our projects. As a result, we anticipate an increase in the number of projects that will adopt continuous quantity tracking.

In addition to Whole Building Lifecycle Assessments performed for our projects pursuing LEED LCA credit, we employ a cradle-to-gate environmental impact assessment. Our tracking tool uses industry average values, with capabilities to input supplier provided EPDs.

MATERIALS AND QUANTITIES WORKFLOW



HOW WE ARE TRACKING

In the past, we used quantity exports from Revit and our internal embodied carbon tracker, WAL-E-COM. This method proved tedious and not feasible in reaching our goals. The new workflow will allow us to better compare tracked projects. One of our goals is to compare our projects so we can better understand our own strengths and shortcomings when it comes to embodied carbon reduction.



PARKLAND MOODY OUTPATIENT CENTER

The Parkland Moody Outpatient Center in Dallas, Texas highlights some of the ideals we hold at MME. This 40,000 square foot facility was designed with the patients in mind. The result is a space in which patients feel welcome. The award-winning facility is LEED Gold- certified, with systems and materials that reduce embodied carbon footprint. One example is the prefabricated facade panels which aid in reduced time and reduced cost in construction.



MME & SE2050

At MME, our commitment remains steadfast in fostering ongoing communication with both project owners and contractors. Our long-term goals include working closer with contractors and material suppliers on how we can further reduce embodied carbon in the construction stage. This may be by requiring EPD's or taking a closer look at mix designs. We have consistently showcased our dedication on our website, and we are actively seeking additional avenues to effectively promote our pledge.

In the upcoming ECAP, our strategy entails hosting an expanded series of seminars, developing a wider range of tools, and achieving an overall enhanced proficiency in managing embodied carbon within our projects.